

USDA Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Template Version 2.09

Voluntary Report - public distribution

Date: 12/6/2005

GAIN Report Number: KS5065

Korea, Republic of Product Brief Tree Nuts and Edible Seeds 2005

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Report Highlights:

The total size of the tree nut and edible seed market in Korea is estimated at \$87.8 million for 2005, an increase of 15 percent from the previous year. Imports of edible seeds, such as sunflower seeds, and tree nuts, such as almonds, walnuts, pistachios, pecans and macadamia nuts, have increased steadily. The growing Korean market for healthy foods and the well-being trend has contributed to this increase, especially for nuts. The growth in per capita incomes and the proliferation of new products by a rapidly expanding bakery and confectionery industry have also contributed to this growth. Nuts and edible seeds are increasingly being used for snacks and in food products such as cookies, cakes, ice cream and chocolates.

Includes PSD Changes: No Includes Trade Matrix: No Unscheduled Report Seoul ATO [KS2]

Section 1. Market Overview

The total size of the tree nut and edible seed market in Korea is estimated at \$87.8 million for 2005, an increase of 15 percent from the previous year.

Imports of edible seeds, such as sunflower seeds, and tree nuts, such as almonds, walnuts, pistachios, pecans and macadamia nuts, have increased steadily. Traditionally, Koreans have regarded tree nuts and edible seeds as rare and luxurious products because the climate of Korea is not suitable for producing them in large quantities.

The growing Korean market for healthy foods and the well-being trend has led to an increase in the demand for tree nuts. As Korean consumers are continually being educated on the health benefits of tree nuts through the media and other sources, demand for these products is expected to continue to increase.

The growth in per capita incomes and the proliferation of new products by a rapidly expanding bakery and confectionery industry have also contributed to this growth. Nuts and edible seeds are increasingly being used for snacks and in food products such as cookies, cakes, ice cream and chocolates.

Table 1. Total Imports 2004-2005 Unit: US \$1000

	2004 Total Imports	2004 Imports from the U.S.	2005 ¹ Total Imports	2005 ¹ Imports from the U.S.	Total Percent Change	U.S. Percent Change
Tree Nuts	74,900	44,722	86,461	48,976	13%	8%
Edible Seeds	1256	632	1389	610	11%	-3%
Total	76,156	45,354	87,850	49,586	15%	9%

Note: 1. 2005 is an estimate.

Source: Korea International Trade Association

As one of the export leaders, the United States has the opportunity to continue to be a part of this increase in tree nut and edible seed consumption. The main U.S. competitor is China. It is estimated that in 2005 the United States and China will show an increase of 12 percent and 14 percent respectively, each holding \$5.1 billion of the Korean tree nut and edible seed import market.

India Sudan Rest of World 8%

China 30%

U.S. 31%

Table 2. 2004 Market Share Tree Nut and Seed Imports

Source: Korea International Trade Association

Table 3. Advantages and Challenges for the United States

Advantages	Challenges
The U.S. name and products are well	There are high tariff rates and strict
known and regarded as being of high	sanitary/phytosanitary regulations on
quality.	imports of many tree nuts and seeds.
Korean consumers are looking for foods	Korean consumers may not be aware of
that provide health benefits.	the health benefits of new-to-market tree
	nuts and edible seeds.
Korean consumers are looking for foods	Koreans have little knowledge regarding
with new flavors.	the preparation and use of tree nuts and
	edible seeds in food dishes.

In the retail sector, tree nuts and edible seeds are mainly seen as ingredients for products such as cookies, cakes or chocolates. It is difficult to find nuts or seeds being retailed as snack items. This idea of using these foods as a snack is new to the Korean consumer. Consumers have only begun to view nuts and seeds in this manner as they are being educated on the health benefits of eating new-to-market nuts and seeds through various promotional vehicles such as magazine articles and television advertisements.

In the HRI sector, nuts and seeds are mainly being used as ingredients in bakery and confectionary products. This sector is increasing their demand for nuts and seeds as more consumers are enjoying the flavor that these foods provide to traditional dishes.

Section II. Market Sector Opportunities and Threats

1. Entry Strategy

The current best strategy to enter the tree nut and edible seed sector of the retail market is to contact and work with an established importer as few retailers import directly. This may change in the future, as large retailers continue to seek direct imports and importers begin to open smaller specialized retail outlets.

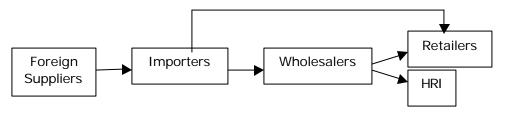
In the HRI market, the current best strategy is to work with an established importer who has an effective sales/marketing and distribution network focused on target customers. An exporter may also develop products, including making changes to existing recipes and specifications, that meet consumer tastes and trends. It is important to remember to

maintain price competitiveness by trading in a large volume and/or by adding value to the product.

Established importers should be able to provide market intelligence, up-to-date information, guidance on business practices and trade related regulations, sales contacts with existing and potential buyers, and market development expertise.

The Korean government maintains very strict regulations on tree nut and edible seed imports and requires various documents before import clearance. Therefore, the exporter must provide the importer with the necessary information to be submitted to the Korean government. An importer will be able to assist in this process.

Table 4. Distribution Supply Channel



- 2. Market Size, Structure and Trends
- a. Domestic Production

Korea's domestic tree nut production primarily consists of chestnuts and walnuts. Nut and edible seed production is minimal for all other varieties. This production is forecast to continue to decline over time while demand continues to increase. The long-term decline is attributed to the rapidly increasing production costs and the lack of mechanization in production and processing. This increasing shortfall in the Korean market will continue to be filled by imports.

The Korean government protects domestic production of chestnuts and walnuts through their use of high tariff rates and import restrictions. In 2004, Korea exported 22 percent of its chestnut production and roughly 5 percent of its walnut production.

Table 5. Domestic Production of Tree Nuts
Unit: Thousand Kg

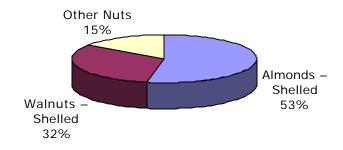
	2000	2001	2002	2003	2004	2005 ¹
Walnuts	1,079	1,064	1,052	918	836	744
Chestnuts	92,844	94,130	72,405	60,017	71,796	61,744
Total	161.341	159,422	139.287	109.561	137,485	133,361

Note: 1. 2005 is an estimate. Source: Korea Forest Service

b. Tree Nuts

The most popular tree nuts in Korea are almonds, but the competing walnut industry is beginning to capture a larger portion of the market, showing a growth in share of 11 percent from the previous year. The share of most other nuts, such as pecans, is growing but does not hold a substantial portion of the market.

Table 6. 2004 Market Share of Imported Tree Nut Varieties

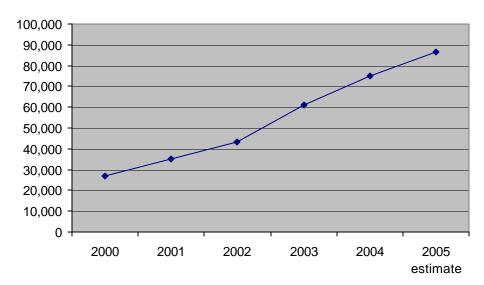


Source: Korea International Trade Association

Total Tree Nut Imports

Over the past five years, tree nut imports to Korea have been steadily increasing. This trend is the result of continuing consumer education and demand for healthier foods in the Korean diet. Many promotional seminars and educational events showcasing these health benefits and product uses have attributed to this increase.

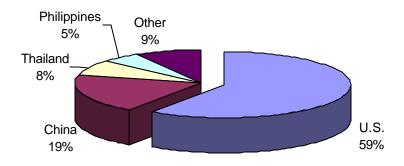
Table 16. Total Tree Nut Imports



Source: Korea International Trade Institute

The United States increased the value of their exports to Korea by 30 percent in 2004 from the previous year, to a value of \$44.7 million. China, the largest competitor of the U.S., had 2004 imports valued at \$14.4 million, an increase 1.3 times from the previous year. It is estimated in 2005 that total tree nuts imports from the United States will be valued at \$48.9 million while those from China will be \$20.1 million.

Table 17. 2004 Market Share Total Tree Nut Imports



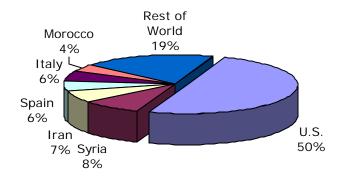
Source: Korea International Trade Institute

Almonds

The promotion of U.S. almonds has been successful at developing an established market and creating a recognizable name in Korea; and the almond market is expected to see continued growth. As a result, almonds have become the most widely used nut in Korean products.

All sweet almonds in the Korean market are imported. Worldwide suppliers of almonds are the United States, Syria, Iran, Spain, Italy and Morocco. The U.S. holds a strong grasp on the Korean in-shell and shelled almond market with a 99 percent market share in 2004.

Table 7. World Almond Production by Country 2004



Source: Food and Agriculture Organization, United Nations

In 2004, the Korean almond market increased 19 percent to \$25.7 million. It is estimated that in 2005, the market will increase another 31 percent to \$34 million. This continuing growth trend is the result of a growing demand for healthier foods and the increased knowledge Korean consumers have regarding almond use.

Almonds are found in confectionary, bakery, and dairy products. In the snack food market, almonds are used in chocolate bars and are competing against peanuts. Almonds are also frequently being used as a paste (marzipan) and in cereals.

Educational seminars have assisted manufacturers in establishing new products using almonds. Non-traditional products that use almonds as an ingredient, such as in cereal, are being created to fit the health conscious Korean consumer. Other uses in desserts are also being developed.

40,000 35,000 30,000 25,000 20,000 15,000 10,000 5,000 0 -2000 2001 2002 2003 2004 2005 estimate

Table 8. U.S. Almond – Shelled Imports (HS 0802.12.0000)

Source: Korea International Trade Association

Walnuts

Walnut imports from the U.S. are shelled, as in-shell walnuts are prohibited. Additional market access constraints have been removed or revised allowing for freer flowing trade. Still, a high tariff, fumigation protocol, and Product Liability (PL) Act continue to restrict the market. The PL act requires distributors to guarantee that virtually no foreign material or shell is present among shelled walnuts. As a result, the PL act has created a new high quality market for shelled walnuts, which Korean consumers are benefiting from.

Consumer demand for walnuts is filled through approximately one-third domestic production and two-thirds imports. World suppliers of walnuts are the United States, China, Iran and Turkey. The U.S. held a market share of 94 percent in 2004, and the closest competitor for the Korean market is China.

Rest of
World
28%
30%

Turkey
9% Iran
12%
U.S.
21%

Table 9. World Walnut Production by Country 2004

Source: Food and Agriculture Organization, United Nations

In 2004, Korean imports of shelled walnuts from the United States nearly doubled from the previous year with an increase of 83 percent. In 2005, it is estimated that the growth will continue with an increase of 11 percent.

This dramatic increase in Korean walnut importation is the direct result of seminars and consumer education focusing on health benefits, superior quality and taste, and the high versatility of walnuts.

Although the focus on developing new recipes remains in the baking industry, more attention is being directed toward confectionery companies, ice cream manufacturers/retailers and restaurants. This shift is occurring because of a growing consumer demand for food products containing walnuts.

Table 10. Imports of Walnuts – Shelled (HS 0802.32.0000) Unit: US \$1000

	2000	2001	2002	2003	2004	2005 ¹	2004 Market Share
U.S.	3965	4523	5581	7837	14,375	15,978	94%
Total	3995	4529	5752	8076	15,358	18,890	

Note: 1. 2005 is an estimate.

Source: Korea International Trade Institute

Consumption of walnuts is highest from mid-January through February, during the Lunar New Year, as the consumption of walnuts is believed to rid oneself of bad luck. Most walnuts however are eaten throughout the year in processed foods. Walnuts have traditionally been known to be bitter and unattractive and rarely have walnuts been represented as the feature ingredient.

For this reason, new product uses for walnuts, such as walnut ice cream and walnut chocolate candy bars, have expanded the market in Korea. Walnuts can also be used in breads, rolls, pastries, cookies, cakes and cheeses. As a snack, shelled walnuts may be served in halves, chopped as a topping for a dessert or as coated fried walnuts glazed with honey. Rice porridge with walnuts is very popular, especially among young children.

Pistachios

All pistachios in the Korean market are imported. The major competitor for the United States is Iran. While the U.S. produces roughly a third of the pistachios produced by Iran, exports to Korea from the two countries nearly equal each other.

Rest of 53%
World 2%
China 5%
Syria 9% Turkey U.S. 16%

Table 11. World Pistachio Production by Country 2004

Source: Food and Agriculture Organization, United Nations

In 2004, Korean pistachio imports from the United States were \$649 thousand, down 69 percent from the previous year. This large decline in U.S. imports was due largely to issues regarding pistachio quality. The U.S. pistachio industry has implemented a federal marketing order to mandate tighter quality standards and inspection to assure consistency in the quality of pistachios. Conversely, imports from Iran in 2004 were \$728 thousand; approximately 17 times the amount imported the previous year. It is estimated that in 2005 the United States will regain a portion of the Korean pistachio market increase their imports to \$1.7 million while imports from Iran will decrease to \$699 thousand.

Pistachios are primarily served as a snack item in Korea, although they are increasingly being used by the food industry as ingredients in making confectioneries, ice cream, candies, sausages, baked goods, and flavorings.

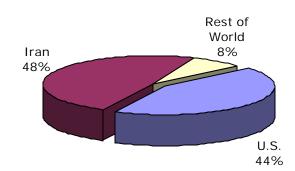


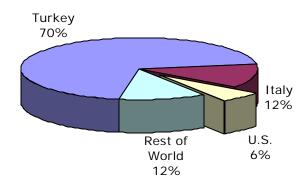
Table 12. 2004 Market Share Pistachio Imports (HS 0802.50.0000)

Source: Korea International Trade Institute

Hazelnuts

In 2004, Turkey captured 99 percent of the Korean hazelnut market, with imports being \$1.5 million. It is expected that this trend will continue in 2005 with a 67 percent increase to \$2.5 million. The United States exports a meager amount of its hazelnut production to Korea. The main competitor is Turkey, which subsidizes their production of hazelnuts.

Table 13. World Hazelnut Production by Country 2004

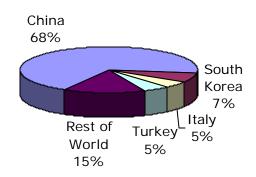


Source: Food and Agriculture Organization, United Nations

Chestnuts

Korea has sufficient domestic production of chestnuts and therefore does not import a large quantity. The United States is not competitive in this market. China is the market leader for both shelled and in-shell chestnuts.

Table 14. World Chestnut Production by Country 2004



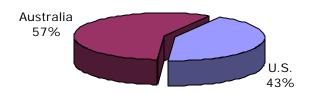
Source: Food and Agriculture Organization, United Nations

Chestnuts have traditionally been one of the most common and popular autumn nuts in Korea. They are consumed fresh, dried, roasted or preserved, especially during the winter months. Chestnuts are consumed together with walnuts during the Lunar year to ensure good health for the coming year.

Pecans, Macadamia Nuts, and Other Nuts

In 2004, imports of pecans, macadamia nuts and other nuts from the United States were valued at \$490 thousand, an increase of two and a half times from the previous year. 2004 imports from Australia increased 10 percent from the previous year to a value of \$659 thousand. It is estimated that in 2005 the U.S. exports will continue to increase to \$596 thousand while exports from Australia will experience a decline to \$455 thousand. This increase is the direct result of the growing popularity of U.S. pecans.

Table 15. 2004 Market Share Pecans, Macadamia Nuts, Other Fresh/Dried Imports (HS 0802.90.9000)



Source: Korea International Trade Institute

Pecans, while new to the Korean consumer, are becoming increasingly popular. They are primarily seen in bakery and confectionery items such as cookies, cakes, candies and pies. Pecans can be used in snack mixes and gift packs when salted, roasted, sugared or spiced. They can also be used as a partial replacement for other fats and wheat flour in cooking. Pecans compete directly with walnuts in the Korean market, as both have similar uses and walnuts are significantly less expensive.

Pecan imports in Korea are on the rise as many bakeries are beginning to use the product as a result of educational seminars promoting the pecan as a healthy and nutritional supplement to the diet. It is estimated that the value of pecan imports from the United States will continue upward, as more Koreans are being educated on the uses of pecans.

The United States is the leader in the Korean pecan market with nearly a 100 percent market share. In the future, Mexico may prove to be a competitor for the U.S. in the pecan market as Koreans continue to desire high quality products. Mexico has a large number of improved tree varieties, which in turn will yield a large quantity of high quality pecans.

The use of macadamia nuts in the Korean market is small, yet growing. These nuts are mainly used in the bakery industry and are often imported for processed food items instead of as a nut. The increase in education regarding macadamia nut use will be crucial in continuing to develop this Korean market.

The United States and Australia are the two largest producers of macadamia nuts and compete for the Korean market.

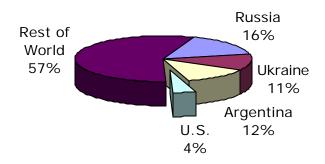
c. Edible Seeds

Sunflower Seeds

The Korean sunflower seed import market has shown a growth of 36 percent over the last five years. In 2004, total sunflower seed imports were \$1.3 million. It is estimated that in 2005, this value will increase to \$1.4 million. This is the result of sunflower seeds being used as ingredients for snacks and in bakery or confectionary products. These seeds are typically not seen on the retail shelves as roasted and salted, but rather chocolate covered.

While the United States produces only a small quantity of sunflower seeds in the world, approximately half of Korean imports come from the U.S. China is the major competitor for the United States in this market.

Table 18. World Sunflower Seed Production by Country 2004

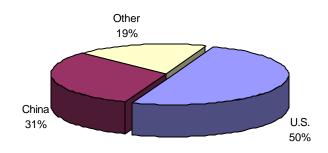


Source: Food and Agriculture Organization, United Nations

In 2004, sunflower seed imports from the United States were valued at \$632 thousand, a 19 percent decrease from the previous year. 2004 imports from China also showed a decrease of 7 percent and a value of \$391 thousand. It is estimated that in 2005, U.S. sunflower seed imports will be valued at \$610 thousand and those from China at \$563 thousand.

This decrease in the value of imports for each country and for total sunflower seed imports is the result of a decreasing consumer demand for sunflower seed products. As consumers become more acquainted with new-to-market products being used in the bakery and confectionary industries, they are demanding less sunflower seeds. A portion of the United States sunflower seed market has also been lost to China due to their ability to produce a less expensive product.

Table 19. 2004 Market Share Sunflower Seeds (HS 1203.00.0000)



Source: Korea International Trade Institute

Section III. Costs and Prices

1. Tariffs and Taxes

Table 20. Tariff Rates for Tree Nuts and Edible Seeds

	HS Code	Tariff Rate
Almonds – In Shell	0802.11.0000	8%
Almonds – Shelled	0802.12.0000	8%
Hazel nuts – In Shell	0802.21.0000	8%
Hazel nuts – Shelled	0802.22.0000	8%
Walnuts - In Shell	0802.31.0000	50%
Walnuts - Shelled	0802.32.0000	50%
Chestnuts – In Shell	0802.40.1000	50%
Chestnuts - Shelled	0802.40.2000	50%
Pistachios	0802.50.0000	30%
Pecans & Macadamia Nuts	0802.90.9000	30%
Sunflower Seeds	1206.00.0000	25%

A Value Added Tax (VAT) is charged on all imported goods and the current rate is 10 percent of the dutiable value. Dutiable value is CIF value (Customs value) plus all the other duties and taxes.

2. Costs in Securing Retail Space

The amount of slotting fee that a retail store would charge for a new product varies depending on the marketing potential of the product. Local retail stores are eager to add new products to their shelves as they strive to meet the consumers' demand for new tastes, but at the same time are very concerned about carrying something new to the market. That is why local retailers often ask for promotional support instead of slotting fees for new products. Promotional support includes in-store advertisement, in-store free sampling, and other point of purchase sales promotions such as sweepstakes, coupons, and games. Free sampling is the most common promotion used, as it costs less and is easier to administer.

In-store promotions are highly recommended for launching new products since consumers make buying decisions based on in-store education and experience.

Continuing to inform Korean consumers of product uses and health benefits would be key in the retail-marketing sector for nuts and edible seeds, as traditionally they have been used for ingredients only. This avenue has potential as Koreans begin to have more knowledge on the health benefits of eating nuts and seeds.

Section IV. Market Access

There are many food standards and regulations that apply to nuts and seeds. This section describes only the basic guidelines of Korean import requirements. For more details on Korean import regulation, see the Food and Agricultural Import Regulations and Standards (FAIRS) Reports (KS5037), dated July 31, 2005, available on the USDA/Foreign Agricultural Service (FAS) website at "http://www.fas.usda.gov/scriptsw/attacherep/default.asp"

1. Sanitary/Phytosanitary (SPS) Constraints

Heavy restrictions are currently placed on imports of tree nuts and edible seeds, and in-shell walnuts from the U.S. are banned. Shelled walnuts from the U.S. are subject to a mandatory methyl bromide (MB) fumigation treatment, which can damage the quality of products. Processed nuts and edible seeds (dried, roasted) often have more liberal import standards. Many phytosanitary concerns may be removed or alleviated through processing.

Import restrictions are frequently changing and many products, fresh and processed, have case-by-case exceptions. An established importer will be able to provide a U.S. supplier with current information on these constraints. The USDA Animal Plant and Health Inspection Service (APHIS) can also be contacted for current Korean regulations.

USDA Animal Plant and Health Inspection Service

Telephone: (011-82-2) 397-4198

Fax: (011-82-2) 725-5496 Email: aphis@kornet.net

Room 303, Leema Bldg 146-1, Susong-dong, Chongro-ku Seoul 110-755 Korea

a. Phytosanitary Certificate

A phytosanitary certificate or a copy issued by the appropriate government authorities of an exporting country should accompany the product and be certified that the product is free from regulated pests, as a result of inspection.

Plants or plant products not accompanied by an official phytosanitary certificate issued by the exporting country will be destroyed or returned to origin.

Plants mentioned below are exempt from a phytosanitary certificate regardless of the above regulation:

- Plants processed by heating, drying, grinding, pressing or sealing in a package to meet the standard prescribed by Director General of NPQS and accompanied by the Export Certificate issued by the inspection agency of the exporting country.
- Frozen products attached with the *Certificate of Quality and Condition or Export Certificate*, which states that the plant was frozen under -17.8°C (0°F), issued by the

appropriate government entity or certified inspection organization of an exporting country, and the frozen condition is maintained.

- Plants imported in traveler's luggage (if not a prohibited plant).
- Plants imported by mail (it not a prohibited plant).
- Plants that Korean customs dispose of by public auction.

b. Inspection

Any person importing plant products is required to apply to NPQS and KFDA for an inspection. There is no post-entry quarantine inspection directly related to the import of nuts and edible seeds.

Products found to be infected with prohibited pests as a result of inspection by Korean officials will be destroyed or returned to origin. Products found to be infected with pests regulated by Korea will be subject to fumigation; otherwise, products will be destroyed or returned to origin.

If the plant protection official deems that imported plants meet import requirements, and are not infected with regulated pests and potential regulated pests as a result of inspection, a *Certificate of Inspection* will be issued at the request of the importer.

Plant products exempt from inspection regardless of previously stated regulations include:

- Products immersed and/or preserved in chemicals, salt, sugar, oil or other preservative materials.
- Products processed to the extent that harmful plant pests can be killed and/or eliminated, and then packed to prevent re-infestation.
- Other products processed to the extent that the presence of harmful plant pests is prohibited.

c. Import Prohibition

- Plant products produced in harmful pest areas that may, if distributed within Korea, be destructive to domestic plants.
- Harmful animals and harmful plants.
- Soil or plants to which soil is attached.
- Containers or package of above plant products.

Frozen plants accompanied by a phytosanitary certificate issued by an official inspection organization of an exporting country stating that the plants were frozen under 17.8°F (0°F), and maintained in the frozen status, are not regarded as import prohibited plants.

2. Standard Label requirements

Imported food products are required by law to have a Korean language label. Korean language stickers may be applied in lieu of a Korean language label. The sticker should not be easily removable and should not cover the original labeling. Labels should have the following inscriptions printed in letters large enough to be readily legible:

- (1) Product name.
- (2) Product type.
- (3) Importer's name and address, and the address where products may be returned or exchanged in the event of defects.

- (4) Manufacture date (month and year).
- (5) Shelf life.
- (6) Contents.
- (7) Ingredient names and content.
- (8) Nutrients.
- (9) Other items designated by the detailed labeling standards for food.

Labeling standards, food codes, and import requirements can change frequently in Korea. Your Korean importer will be the best resource for current information on these requirements.

Section V. Key Contacts and Further Information

U.S. Agricultural Trade Office Telephone: (011-82-2) 397-4188

Fax: (011-82-2) 720-7921 Email: <u>atoseoul@usda.gov</u> Website: <u>www.atoseoul.com</u>

U.S. Mailing Address: Korean address:

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